

The Distribution of *Thelypteris torresiana* in the Southeastern United States¹

STEVEN W. LEONARD*

Near the turn of this century *Thelypteris torresiana* (Gaud.) Alston, a fern new to the United States, was collected in Seminole County, Florida. Small (1938) mentions that it was first collected in Florida by T. L. Mead about 1906; however, a specimen of this taxon collected by A. A. Eaton, dated May 1904, is among the collections at the United States National Herbarium. Both the Mead and Eaton collections came from the vicinity of Oviedo in Seminole County, and on the label of the Eaton specimen a note was added that the plants were escapes from cultivation.

Although the early collections were identified as *Dryopteris setigera* (Blume) Kuntze, the nomenclatural status of this fern has been clarified by Morton (1962), Ching (1963), Reed (1968), Holttum (1969), and others. True *Dryopteris setigera* is a rare Asian species, probably neither cultivated nor naturalized in the New World. The American collections, erroneously identified as *Dryopteris setigera*, are *Thelypteris torresiana*, a combination made by Alston in 1960 based on Guadichaud-Beaupré's *Polystichum torresianum* from Guam. In a recent study of Old World species of *Thelypteris sensu lato*, Holttum (1969) maintains the combination *Macrothelypteris torresiana* (Gaud.) Ching in his revision of the Thelypteridaceae. Until knowledge of this family is further refined, I have followed a more conservative generic treatment.

After 1904–1906, when the first collections of *Thelypteris torresiana* were made in Florida, there were no additional reports of this fern from the southeastern United States until it was located in Polk County, Florida in 1922. A few years later it turned up in Volusia County (1924) and in Manatee County (1926), both in central peninsular Florida. Another ten years elapsed before it was recorded for Highlands and Orange Counties, Florida. In 1938, Small wrote that it was "appearing spontaneously in many remote localities and in great abundance."

The first record of the occurrence of *Thelypteris torresiana* in a state other than Florida was in 1948, when L. C. Crawford located a population in Conecuh County, Alabama. A few years later it was reported from the Coastal Plain of Texas (Newton County) by Correll (1951). It seems likely that by this time *T. torresiana* would have been present also in southern Georgia, southern Mississippi, and Louisiana, although stations in these states were not discovered until 1959, 1961, and 1968, respectively.

* Department of Botany, University of North Carolina, Chapel Hill, NC 27514.

¹ Acknowledgements. Herbarium specimens for this study have been examined from DUKE, FSU, GA, MICH, NCS, NCU, NY, TENN, US, University of South Alabama, and Northeast Louisiana University. I thank the curators at these institutions for access to the collections under their care. I wish to express appreciation to A. Murray Evans for supplying distribution information for the following counties: Citrus and Hillsborough (Florida); Marshall, Smith, Covington, Amite, Pike, and Marion (Mississippi). Also thanks are extended to Norton Miller for his helpful comments on this manuscript.

Volume 62, number 3, of the Journal, pp. 65–96, was issued October 4, 1972.

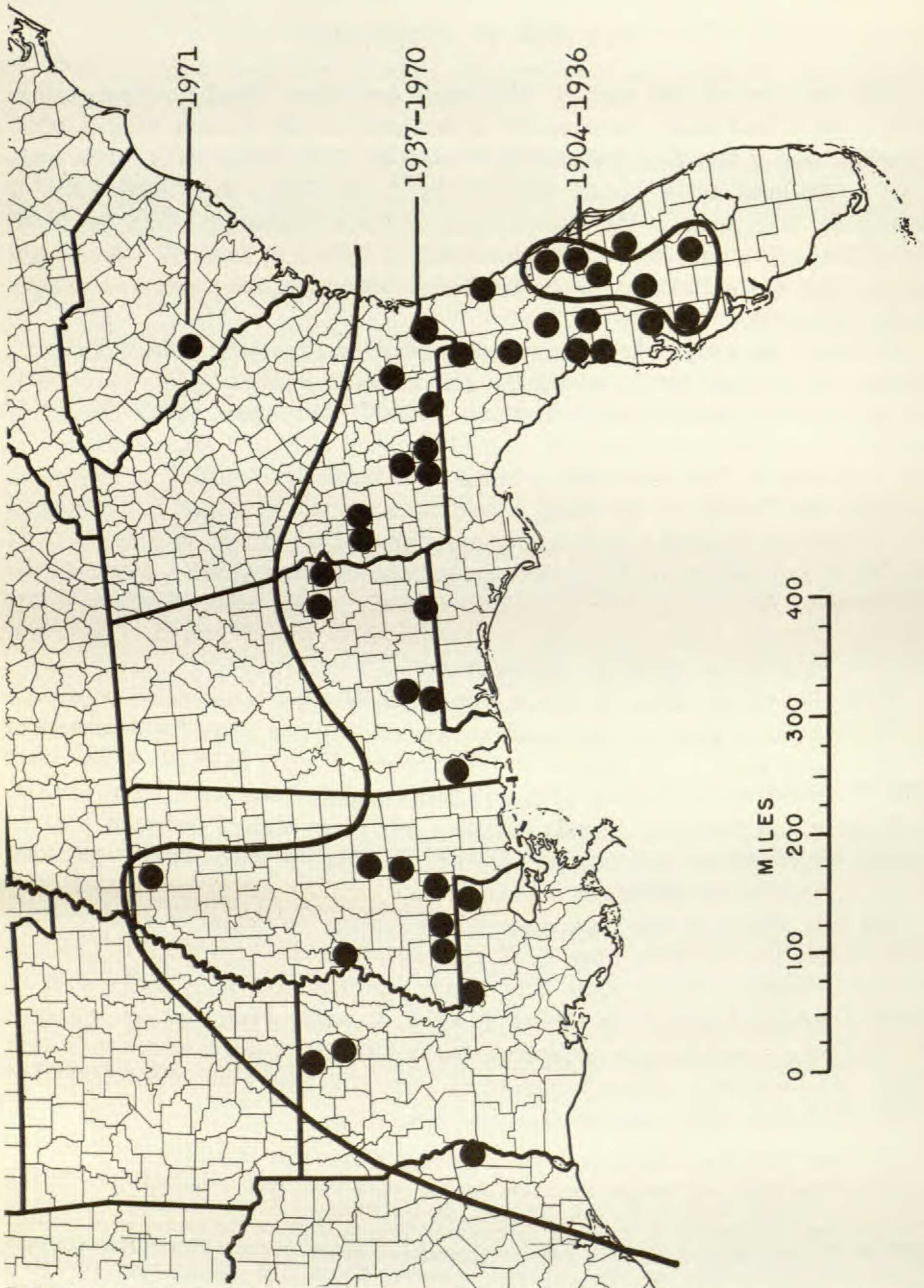


FIG. 1. Distribution and collection dates for *Thelypteris torresiana* in the southeastern United States.

Another state may now be added to the range of *Thelypteris torresiana*. On a field trip to Aiken County, South Carolina, August 23, 1971, the author in the company of J. R. Massey and A. E. Radford discovered a population of *T. torresiana* on a shaded bank of an oxbow in a floodplain forest of the Savannah River, approximately five miles from County Route #5, southeast of Beech Island. Extensive investigation of this area on a later field trip was hampered by heavy rain. However, a few fertile fronds were collected as well as two rhizomes which have grown vigorously in a greenhouse on the campus of the University of North Carolina. Herbarium voucher specimens (*Leonard 4989*, with Massey and Radford; *Leonard 5085*) will be distributed to major herbaria.

The presently known distribution of *Thelypteris torresiana* in the southeastern United States is shown in *Fig. 1*. Examination of herbarium specimens from most counties in this region reveals that the species has been collected most often along streams, frequently near or under bridges, and occasionally in forests over rocky soil derived from limestone. Evidently it prefers cool, moist habitats, and at least at the South Carolina station it thrives in light of low intensity. Based on my experience with the species and its distribution as indicated in *Fig. 1*, it should also occur in Arkansas. Other stations within its presently known range undoubtedly will be found. Moist ravines and banks of Coastal Plain creeks and rivers are promising localities for future exploration.

LITERATURE CITED

- CHING, R. C. 1963. A re-classification of the family Thelypteridaceae from the mainland of Asia. *Acta Phytotax. Sinica* **8**: 289-335.
- CORRELL, D. S. 1951. *Dryopteris setigera* in Texas. *Amer. Fern. J.* **41**: 124.
- HOLTTUM, R. E. 1969. Studies in the family Thelypteridaceae. The genera *Phegopteris*, *Pseudodophegopteris*, and *Macrothelypteris*. *Blumea* **17**: 5-32.
- MORTON, C. V. 1962. Another name change for the Florida fern known as *Dryopteris setigera*. *Amer. Fern J.* **52**: 27-29.
- REED, C. F. 1968. Index Thelypteridis. *Phytologia* **17**: 249-328.
- SMALL, J. K. 1938. *Ferns of the Southeastern States*. Science Press, Lancaster, Pa.

James Leland Edwards

Lee Edwards, as he was more commonly known to the members of the Fern Society, passed away on July 31, 1972 at the age of 77. He was born in East Berlin, Connecticut on June 13, 1895, and graduated from Cornell University in 1917. After serving in the First World War with the Army Air Force, he practiced civil engineering with the firm of Edwards and H. J. Roth of New York. Lee was a member of the American Fern Society from 1932, and was an honorary member of many New Jersey nature and bird clubs. He had a keen knowledge of all of the ferns of New Jersey and was also a specialist in wild orchids. In 1947 Rutgers published the "Ferns of New Jersey" of which he was co-author with the late M. A. Chrysler.